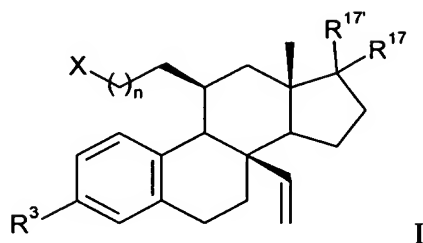


## Claims

## 1. Compounds of general formula I

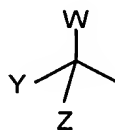


in which

$R^3$  represents a group  $R^{19}$ -O-,  $R^{20}SO_2$ -O-, or -O-C(O) $R^{21}$ ;

$n$  represents 3, 4, or 5:

$X$  represents a group of formula II



in which

$Z$  and  $W$ , independently of one another, represent  $R^{19}$ ,

or

$Z$  and  $W$  together represent an oxygen atom,

$Y$  represents  $OR^{19}$ , -CN, -SCN, a halogen atom,  $R^{20}$ ,  $R^{20}SO_2$ -O-;

or

$Y$  represents  $R^{19}$  or  $R^{20}$ , if  $Z$  and  $W$  together represent an oxygen atom;

$R^{17}$  and  $R^{17'}$  together represent an oxygen atom, or a group  $=CR^{23}R^{24}$ ,

in which

$R^{23}$  and  $R^{24}$ , independently of one another, represent a hydrogen atom or a halogen;

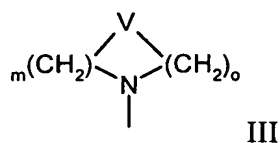
or

$R^{17}$  represents hydrogen,  $-OR^{19}$  or halogen;

$R^{17'}$  represents  $R^{19}$ ,  $-OR^{19}$ , halogen,  $R^{20}SO_2-O-$ ,  $-C(O)R^{21}$  or  $-O-C(O)R^{21}$ ;

$R^{19}$  represents a hydrogen atom,  
a radical of formula  $C_pF_qH_r$  with  $p = 1, 2, 3, 4, 5, 6, 7, 8, 9$ ;  $q > 1$  and  $q+r = 2p+1$ ;  
an unbranched  $C_1-C_8$ -alkyl group or branched  $C_3-C_6$ -alkyl group, a  $C_3-C_6$ -cycloalkyl group that is optionally substituted with a phenyl radical, a  $(C_3-C_6$ -cycloalkyl)- $C_1-C_4$ -alkylene group, a branched or unbranched  $C_2-C_5$ -alkenyl group, a  $C_2-C_5$ -alkinyl group; or an unsubstituted or substituted aryl-, heteroaryl-, heterocyclyl-, aryl- $C_1-C_4$ -alkylene-, or heteroaryl- $C_1-C_4$ -alkylene group;

$R^{20}$  represents an  $R^{21}R^{22}N-$  group, a group  $-C(NOR^{19})H$ , or a group of general formula III



in which

V represents  $-CH_2-$ , an oxygen atom or a sulfur atom, or  $=N-R^{25}$ ;

m represents 0, 1, 2, 3, 4, 5, 6, 7 or 8;

o represents 0, 1, 2, 3, 4, 5, 6, 7 or 8,

whereby their sum

$m + o$  is 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12;

$R^{21}$  and  $R^{22}$ , independently of one another, represent  $R^{19}$ ;

$R^{25}$  represents  $R^{19}$ ,  $R^{20}SO_2-$  or an acyl group  $-C(O)R^{21}$ .

2. Compounds of general formula I according to claim 1, characterized in that  $Y = -OH, -CN, -SCN$ , a halogen, or  $R^{20}$ .
3. Compounds of general formula I according to claim 1, wherein  $Y = R^{20}$ , if Z and W together represent an oxygen atom.
4. Compounds of general formula I according to claim 1, wherein Y represents  $-OH, -CN, -SCN$ , a halogen atom, or  $R^{20}$ ;

and

$R^{17}$  and  $R^{17'}$  together represent an oxygen atom,

or

$R^{17}$  represents hydrogen, or  $-OH$ ;

$R^{17'}$  represents hydrogen,  $-OH$ ,  $C_1-C_4$ -alkyl group,  $C_2-C_5$ -alkenyl group, a  $C_2-C_5$ -alkinyl group, or a trifluoromethyl group.

5. Compounds of general formula I according to claim 1, wherein Y represents  $R^{20}$ , if Z and W together represent an oxygen atom,

and

$R^{17}$  and  $R^{17'}$  together represent an oxygen atom,

or

$R^{17}$  represents hydrogen, or  $-OH$ ;

$R^{17'}$  represents hydrogen,  $-OH$ ,  $C_1-C_4$ -alkyl group,  $C_2-C_5$ -alkenyl group, a  $C_2-C_5$ -alkinyl group, or a trifluoromethyl group.

6. Compounds according to claim 1, namely

11 $\beta$ -[(R) 6,6,6-Trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[(S) 6,6,6-Trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[7,7,7-Trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[7,7,7-Trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[8,8,8-Trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol, (Diastereomer 1),

11 $\beta$ -[8,8,8-Trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[6,6,6-Trifluoro-5-hydroxy-5-(trifluoromethyl)hexyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[7,7,7-Trifluoro-6-hydroxy-6-(trifluoromethyl)heptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[8,8,8-Trifluoro-7-hydroxy-7-(trifluoromethyl)octyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[7,7,7,6,6-Pentafluoro-5-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[7,7,7,6,6-Pentafluoro-5-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[8,8,8,7,7-Pentafluoro-6-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[8,8,8,7,7-Pentafluoro-6-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[9,9,9,8,8-Pentafluoro-7-hydroxynonyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[9,9,9,8,8-Pentafluoro-7-hydroxynonyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[8,8,8,7,7,6,6-Heptafluoro-5-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[8,8,8,7,7,6,6-Heptafluoro-5-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[9,9,9,8,8,7,7-Heptafluoro-6-hydroxynonyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[9,9,9,8,8,7,7-Heptafluoro-6-hydroxynonyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[10,10,10,9,9,8,8-Heptafluoro-7-hydroxydecyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[10,10,10,9,9,8,8-Heptafluoro-7-hydroxydecyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -(5-Bromopentyl)-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[5-(Methylamino)pentyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[5-(Dimethylamino)pentyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[5-(Pyrrolidin-1-yl)pentyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[5-(1-Piperidyl)pentyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -(5-Morpholinopentyl)-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{5-[Methyl(9,9,9,8,8-pentafluorononyl)amino]pentyl}-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{5-[(9,9,9,8,8,7,7-Heptafluorononyl)methylamino]pentyl}-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{5-[Methyl(octanoyl)amino]pentyl}-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -(6-Chlorohexyl)-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[6-(Methylamino)hexyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[6-(Dimethylamino)hexyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[6-(Pyrrolidin-1-yl)hexyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[6-(1-Piperidyl)hexyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -(6-Morpholinohexyl)-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{6-[Methyl(9,9,9,8,8-pentafluorononyl)amino]hexyl}-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{6-[(9,9,9,8,8,7,7-Heptafluorononyl)methylamino]hexyl}-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{6-[Methyl(octanoyl)amino]hexyl}-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -(7-Bromoheptyl)-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[7-(Methylamino)heptyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[7-(Dimethylamino)heptyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[7-(Pyrrolidin-1-yl)heptyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -[7-(1-Piperidyl)heptyl]-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -(7-Morpholinoheptyl)-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{7-[Methyl(9,9,9,8,8-pentafluorononyl)amino]heptyl}-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{7-[(9,9,9,8,8,7,7-Heptafluorononyl)methylamino]heptyl}-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -{7-[Methyl(octanoyl)amino]heptyl}-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,

*N*-*n*Butyl-*N*-methyl-5-[3,17 $\beta$ -dihydroxy-8-vinylestra-1,3,5(10)-trien-11 $\beta$ -yl]valeramide,

*N*-*n*Butyl-*N*-methyl-6-[3,17 $\beta$ -dihydroxy-8-vinylestra-1,3,5(10)-trien-11 $\beta$ -yl]capronamide,

*N*-*n*Butyl-*N*-methyl-7-[3,17 $\beta$ -dihydroxy-8-vinylestra-1,3,5(10)-trien-11 $\beta$ -yl]enanthoamide,

11 $\beta$ -(5-Thiocyanatopentyl)-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -(6-Thiocyanatohexyl)-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

11 $\beta$ -(7-Thiocyanatoheptyl)-8-vinylestra-1,3,5(10)-triene-3,17 $\beta$ -diol,

6-[3,17 $\beta$ -Dihydroxy-8-vinylestra-1,3,5(10)-trien-11 $\beta$ -yl]capronitrile,

7-[3,17 $\beta$ -Dihydroxy-8-vinylestra-1,3,5(10)-trien-11 $\beta$ -yl]enanthonitrile,

17 $\beta$ -Hydroxy-11 $\beta$ -[(*R*) 6,6,6-trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[(*S*) 6,6,6-trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[7,7,7-trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[7,7,7-trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,8-trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate, (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,8-trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[6,6,6-trifluoro-5-hydroxy-5-(trifluoromethyl)hexyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[7,7,7-trifluoro-6-hydroxy-6-(trifluoromethyl)heptyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,8-trifluoro-7-hydroxy-7-(trifluoromethyl)octyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[7,7,7,6,6-pentafluoro-5-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[7,7,7,6,6-pentafluoro-5-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,8,7,7-pentafluoro-6-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,8,7,7-pentafluoro-6-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[9,9,9,8,8-pentafluoro-7-hydroxynonyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[9,9,9,8,8-pentafluoro-7-hydroxynonyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),



11 $\beta$ -[5-(Dimethylamino)pentyl]-17 $\beta$ -hydroxy-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[5-(pyrrolidin-1-yl)pentyl]-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[5-(1-piperidyl)pentyl]-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -(5-morpholinopentyl)-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

11 $\beta$ -[6-(Dimethylamino)hexyl]-17 $\beta$ -hydroxy-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[6-(pyrrolidin-1-yl)hexyl]-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[6-(1-piperidyl)hexyl]-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -(6-morpholinohexyl)-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

11 $\beta$ -[7-(Dimethylamino)heptyl]-17 $\beta$ -hydroxy-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[7-(pyrrolidin-1-yl)heptyl]-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -[7-(1-piperidyl)heptyl]-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

17 $\beta$ -Hydroxy-11 $\beta$ -(7-morpholinoheptyl)-8-vinylestra-1,3,5(10)-trien-3-yl-sulfamate,

11 $\beta$ -[7,7,6-Trifluoro-5-hydroxyhept-6-enyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[7,7,6-Trifluoro-5-hydroxyhept-6-enyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[8,8,7-Trifluoro-6-hydroxyoct-7-enyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[8,8,7-Trifluoro-6-hydroxyoct-7-enyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[9,9,8-Trifluoro-7-hydroxynon-8-enyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[9,9,8-Trifluoro-7-hydroxynon-3-enyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[5-Hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[5-Hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[6-Hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[6-Hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

11 $\beta$ -[7-Hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 1),

11 $\beta$ -[7-Hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol (Diastereomer 2),

- 11 $\beta$ -[5-Methyl-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,  
 11 $\beta$ -[6-Methyl-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,  
 11 $\beta$ -[7-Methyl-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-triene-3,17 $\beta$ -diol,  
 17 $\alpha$ -Methyl-11 $\beta$ -[(R) 6,6,6-trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-  
 triene-3,17 $\beta$ -diol (Diastereomer 1),  
 17 $\alpha$ -Methyl-11 $\beta$ -[(S) 6,6,6-trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-  
 triene-3,17 $\beta$ -diol (Diastereomer 2),  
 17 $\alpha$ -Methyl-11 $\beta$ -[7,7,7-trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-  
 triene-3,17 $\beta$ -diol (Diastereomer 1),  
 17 $\alpha$ -Methyl-11 $\beta$ -[7,7,7-trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-  
 triene-3,17 $\beta$ -diol (Diastereomer 2),  
 17 $\alpha$ -Methyl-11 $\beta$ -[8,8,8-Trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-  
 triene-3,17 $\beta$ -diol (Diastereomer 1),  
 17 $\alpha$ -Methyl-11 $\beta$ -[8,8,8-trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-  
 triene-3,17 $\beta$ -diol (Diastereomer 2).  
 17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,8,7,7,6,6-heptafluoro-5-hydroxyoctyl]-8-vinyl-estra-  
 1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),  
 17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,8,7,7,6,6-heptafluoro-5-hydroxyoctyl]-8-vinyl-estra-  
 1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),  
 17 $\beta$ -Hydroxy-11 $\beta$ -[9,9,9,8,8,7,7-heptafluoro-6-hydroxynonyl]-8-vinyl-estra-  
 1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),  
 17 $\beta$ -Hydroxy-11 $\beta$ -[9,9,9,8,8,7,7-heptafluoro-6-hydroxynonyl]-8-vinyl-estra-  
 1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[10,10,10,9,9,8,8-heptafluoro-7-hydroxydecyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[10,10,10,9,9,8,8-heptafluoro-7-hydroxydecyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[7,7,6-trifluoro-5-hydroxyhept-6-enyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[7,7,6-trifluoro-5-hydroxyhept-6-enyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,7-trifluoro-6-hydroxyoct-7-enyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[8,8,7-trifluoro-6-hydroxyoct-7-enyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-11 $\beta$ -[9,9,8-trifluoro-7-hydroxynon-8-enyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-11 $\beta$ -[9,9,8-trifluoro-7-hydroxynon-8-enyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-17 $\alpha$ -methyl-11 $\beta$ -[(1R) 6,6,6-trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-17 $\alpha$ -methyl-11 $\beta$ -[(S) 6,6,6-trifluoro-5-hydroxyhexyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

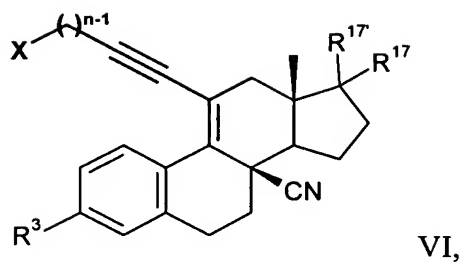
17 $\beta$ -Hydroxy-17 $\alpha$ -methyl-11 $\beta$ -[7,7,7-trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

17 $\beta$ -Hydroxy-17 $\alpha$ -methyl-11 $\beta$ -[7,7,7-trifluoro-6-hydroxyheptyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2),

17 $\beta$ -Hydroxy-17 $\alpha$ -methyl-11 $\beta$ -[8,8,8-trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 1),

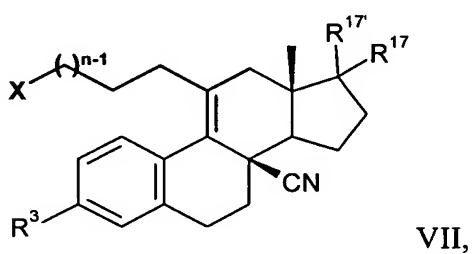
17 $\beta$ -Hydroxy-17 $\alpha$ -methyl-11 $\beta$ -[8,8,8-trifluoro-7-hydroxyoctyl]-8-vinyl-estra-1,3,5(10)-trien-3-yl-sulfamate (Diastereomer 2).

7. Pharmaceutical compositions that contain at least one compound according to one of the preceding claims as well as a pharmaceutically compatible adjuvant and/or vehicle.
8. Pharmaceutical compositions that contain at least one compound according to one of the preceding claims, which, in addition to at least one compound of general formula I according to claim 1, contain at least one compound that is selected from the group of GnRH antagonists, progesterone receptor antagonists, mesoprogestins, gestagens or tissue-selective gestagens.
9. Use of the compounds of general formula I according to one of claims 1 to 6 for the production of a pharmaceutical agent.
10. Use of the compounds of general formula I according to claim 9 for contraception in women.
11. Use of the compounds of general formula I according to claim 9 for contraception in men.
12. Use of the compounds of general formula I according to claim 9 for treating benign or malignant proliferative diseases of the ovary.
13. Use according to claim 12 for treating ovarian cancer.
14. Use according to claim 12 for treating granulosa cell tumors.
15. Use according to one of claims 9 to 14, wherein the function of other estrogen-sensitive organs such as the uterus or liver is not impaired.
16. Intermediate products of general formula VI



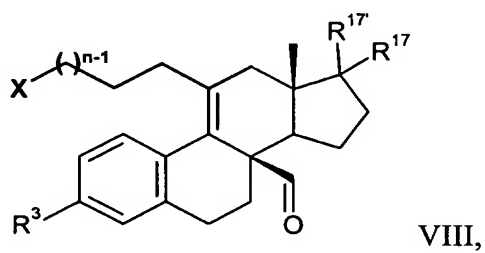
in which radicals X, R<sup>3</sup>, R<sup>17</sup>, R<sup>17'</sup> and n have the same meaning as that in general formula I.

17. Intermediate products of general formula VII



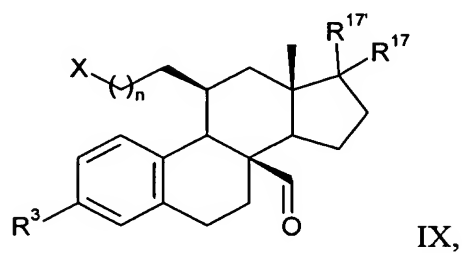
in which radicals X, R<sup>3</sup>, R<sup>17</sup>, R<sup>17'</sup> and n have the same meaning as that in general formula I.

18. Intermediate products of general formula VIII



in which radicals  $X$ ,  $R^3$ ,  $R^{17}$ ,  $R^{17'}$  and  $n$  have the same meaning as that in general formula I.

19. Intermediate products of general formula IX



in which radicals  $X$ ,  $R^3$ ,  $R^{17}$ ,  $R^{17'}$  and  $n$  have the same meaning as that in general formula I.